LISTING OF THE CLAIMS:

The following claim listing is meant to replace all previous claim listing.

Claim 1 (Currently Amended): A process for producing branched fatty acids, comprising:

a. introducing a recombinant nucleic acid coding for a methyl transferase ~~catalyzing~~ that catalyzes the transfer of a methyl group to an aliphatic chain of an unsaturated fatty acid into a plant cell, a plant tissue or a seed of a plant;

b. regenerating a transgenic plant from the plant cell, the plant tissue or the seed of the plant wherein said transgenic plant produces branched fatty acids; and

c. recovering said branched fatty acids from said transgenic plant.

Claim 2 (Previously Presented): The process according to claim 1, further comprising the step of extracting the branched fatty acids.

Claims 3 – 11 (Cancelled).

Claim 12 (Currently Amended): A recombinant nucleic acid comprising in the following order:

a. a plant expressible promoter ~~regulating~~ that regulates the expression of a nucleic acid coding for a methyl transferase ~~catalyzing~~ that catalyzes the transfer of a methyl group to an aliphatic chain of an unsaturated fatty acid;

b. a nucleic acid coding for said methyl transferase; and

c. a 3' transcription termination sequence.

Claim 13 (Previously Presented): The nucleic acid according to Claim 12, wherein the promoter expresses the nucleic acid in a seed of a plant.

Claims 14 - 16 (Cancelled).

Claim 17 (Previously Presented): A vector comprising a recombinant nucleic acid according to claim 12.

Claim 18 (Previously Presented): A plant cell comprising a recombinant nucleic acid according to Claim 12.

Claim 19 (Cancelled).

Claim 20 (Previously Presented): A transgenic plant comprising at least one cell according to claim 18.

Claim 21 (Previously Presented): A transgenic plant comprising at least in one part of its cells, a nucleic acid according to Claim 12.

Claim 22 (Cancelled).

Claim 23 (Previously Presented): A process for preparing branched fatty acids from a transgenic plant whose cells contain a recombinant nucleic acid according to Claim 12, comprising :

culturing said transgenic plant in field;
recovering the seeds from said transgenic plant; and
extracting the branched fatty acids from these seeds.

Claims 24 - 29 (Cancelled).

Claims 30 (Previously Presented): The plant cell according to claim 18, wherein said plant cell is colza, sunflower, peanut, soya, flax or maize.

Claims 31 (Previously presented): The process according to claim 1, further comprising the steps of:

culturing said plant cell in a medium suitable for growth; and

extracting and purifying the branched fatty acids from said plant cell or from the supernatant of said medium.

Claim 32 (Previously Presented): The nucleic acid according to Claim 12, wherein the plant expressible promoter is a nopaline synthase promoter (nos) or an octopine synthase promoter (ocp) or a mannopine promoter or a agropine promoter or an acyl carrier protein promoter (ACP).

Claim 33 (Previously Presented): The nucleic acid according to Claim 12, wherein the plant expressible promoter is an acyl carrier protein promoter (ACP) or a napine promoter.

Claim 34 (Previously presented): The nucleic acid according to Claim 12, wherein the plant expressible promoter is a promoter of a 35S cauliflower mosaic virus gene or a promoter of a 19S cauliflower mosaic virus gene.

Please add the following new claims:

Claim 35 (New): A process for producing branched fatty acids, comprising:

Claims 24 - 29 (Cancelled).

Claims 30 (Previously Presented): The plant cell according to claim 18, wherein said plant cell is colza, sunflower, peanut, soya, flax or maize.

Claims 31 (Previously presented): The process according to claim 1, further comprising the steps of:

culturing said plant cell in a medium suitable for growth; and
extracting and purifying the branched fatty acids from said plant cell or from the supernatant of said medium.

Claim 32 (Previously Presented): The nucleic acid according to Claim 12, wherein the plant expressible promoter is a nopaline synthase promoter (nos) or an octopine synthase promoter (ocp) or a mannopine promoter or a agropine promoter or an acyl carrier protein promoter (ACP).

Claim 33 (Previously Presented): The nucleic acid according to Claim 12, wherein the plant expressible promoter is an acyl carrier protein promoter (ACP) or a napine promoter.

Claim 34 (Previously presented): The nucleic acid according to Claim 12, wherein the plant expressible promoter is a promoter of a 35S cauliflower mosaic virus gene or a promoter of a 19S cauliflower mosaic virus gene.

Please add the following new claims:

Claim 35 (New): A process for producing branched fatty acids, comprising:

a. introducing a recombinant nucleic acid coding for a S-adenosyl-methionine that catalyzes the transfer of a methyl group to an aliphatic chain of an unsaturated fatty acid into a plant cell, a plant tissue or a seed of a plant;

b. regenerating a transgenic plant from the plant cell, the plant tissue or the seed of the plant wherein said transgenic plant produces branched fatty acids; and

c. recovering said branched fatty acids from said transgenic plant.

Claim 36 (New): A recombinant nucleic acid comprising in the following order:

a. a plant expressible promoter that regulates the expression of a nucleic acid coding for a S-adenosyl methionine that catalyzes the transfer of a methyl group to an aliphatic chain of an unsaturated fatty acid;

b. a nucleic acid coding for said S-adenosyl methionine; and

c. a 3' transcription termination sequence.